



## The Indianapolis Radio Club Newsletter

Founded 1914

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### *September 2021 Newsletter*

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#### **Upcoming Meetings:**

**October 8:** Carl Luetzelschwab, K9LA, ARRL Central Division Director, will be giving an ARRL update.

**November 12:** Patrick Bolan, KJ7ZSU, “Head Wrangler” of Geochron, will give an overview of the new Ham Radio Bundle for the Digital Geochron 4K, as well as some of the history of Geochron.

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#### **Highlights from the September Meeting:**

Called to order via Zoom at 7:36 by club president, David Spoelstra, N9KT.

There were 25 in attendance.

Bob Heil, K9EID, was our speaker, via Zoom, to give us a follow-up presentation to the audio presentation he gave us in December. This was meeting number 232 for Bob. He gave a little presentation of his history. He was a theatre organist, and then helped an organ tech tune the organ. This taught him to listen. He had two towers up at his parents home. He then put up a 128 element 2 meter array on another tower at his parents house.

Then he got into audio by way of the organ work. He started a music shop that rented organs, then got some audio gear left over from an organ installation. That started his PA work. He gave his history in the touring world having worked with artists such as *The*

*Grateful Dead, Jimi Hendrix, and The Who.* Paul Klipsch (of Klipsch speaker fame) called him out of the blue to learn from Bob about his speakers. Everything Bob has learned about electronics was from ham radio. He told about the early telephone system audio, and how Bell Labs had 4000 scientists that worked to get phone audio to sound better. This led to the discovery that 2.5 KHz is the “sweet spot” for speech. Bob demonstrated this sweet spot with a parametric EQ. He showed a simple passive EQ circuit to make 2.5K “pop”. The audio equalizer was developed in 1967 by Langevin. Daniel Flickenger came up with the parametric EQ in 1972.

Bob had been off ham radio for 12 years, and when he came back in 1976, he was amazed at how bad the audio was he heard on the air. In 1982 he built the EQ-200, which was the first equalizer for ham radio. Bob had a call from the owner of Icom regarding how to make their radios sound good. So, Bob’s EQ 200 was built into their radios. He did a demonstration of audio articulation with a small balloon. Bob gave his preferred EQ settings for Icom and Yaesu radios. He gave examples of 2.4 K bandwidth, from older radios and 2.9 K on newer radios. He showed the effect of his “full range “ windscreen, and demonstrated microphone techniques. He showed the importance of close mic’ing. Bob demonstrated the effects of phasing, both in audio (with microphones) and RF (with yagi antenna, and 75 meter phased array).

“It all starts with the microphone” is a free publication on the Heil website. Also, his Handbook is for sale on his website (<https://heilhamradio.com/>). When Bob opened up for questions from the floor, he offered to help Gordon, KD9RUE, on the air, who asked about audio settings for his new HF radio. Bob plugged the Sunday afternoon vintage sideband net, that meets on 14293.5 at 2:00 pm local time.

After Bob’s presentation, David opened a short business meeting. There were no new hams in attendance. Cathy Harris, W9QKR, has upgraded from tech to general, and acquired a new call sign since the last meeting. There were no tech questions from the floor. David announced that the club is in search of a meeting location, and asked if anyone has any leads on a location that we could get for no more than \$50 per meeting, to contact him at [president@indyradioclub.org](mailto:president@indyradioclub.org). David then asked Club Secretary/Treasurer, Ken Bandy, KJ9B, to give a report regarding dues payments and the club’s participation in the Kroger Community Rewards Program and the Amazon Smile Program (details on these items are later in this newsletter).

## Ham Radio News:

### CLUB DUES ARE DUE, AND PAYABLE VIA PAYPAL NOW!

Club Dues are receivable at any time. Dues paid from now until the end of the year will apply to 2022 dues. Individual dues are \$20 per year, or Family dues are \$30 per year (all family members need to live in the same household). Dues can be paid with PayPal at [treasurer@indyradioclub.org](mailto:treasurer@indyradioclub.org). Be sure to send the payment as a “friend”, **not for** “goods and services”. This will prevent any fees being assessed to the payment. For those that don’t have a PayPal account, you can send a check made out to “Indianapolis Radio Club” to Ken Bandy, 7405 E. County Road 900 N, Brownsburg, IN 46112.

### SUPPORT YOUR CLUB VIA KROGER AND AMAZON

How would you like to support the Indianapolis Radio Club without it costing you anything? Well, when you buy groceries from Kroger, or make purchases from Amazon, you can do just that. The Indianapolis Radio Club is registered with both the “Kroger Community Rewards” program and the “Amazon Smile” program.

To Use the Kroger Community Rewards Program:

Point your browser to <http://www.kroger.com>. Once logged into your Kroger account you can search for INDIANAPOLIS RADIO CLUB either by name or the club’s designator of GE677 and then click Enroll. New users will need to create an account which requires some basic information, a valid email address and a rewards card. ***“Insider tip” from your editor: We always buy gift cards at Kroger for restaurants and other vendors we frequent. Gift card purchases always are worth at least double points toward gas discounts. Fairly often gift cards are worth 4x points. We quite often get a dollar per gallon gas discount. That adds up quickly when filling a 25 gallon tank!***

To use the Amazon Smile Program:

Point your browser to <https://smile.amazon.com/ch/36-4968059>. This link should take you to smile.amazon.com, and automatically ask if you want to support the Indianapolis Radio Club. Once you get set up to support the club with your Amazon purchases, remember to always go to <https://smile.amazon.com/> when placing your Amazon orders.

## **“HILLY HUNDRED” NEEDING VOLUNTEERS**

*Following is a note from Tom Myers, K9TEM, from Bloomington regarding the “Hilly Hundred”:*

Calling All Prospective Volunteers!

The 53d Annual Hilly Hundred Weekend is just a few weeks away! The Hilly will occur on October 9th and 10th. There are several slots open, and there's still time to volunteer at <http://www.hillyhundred.org/>. Just follow the Volunteer links. Yes, the Registration process is involved; so be patient! Remember, you'll have to register for the Hilly in order to get your free Hilly Helper T-shirt!

After registering as a Volunteer, please email me with your Hilly Hundred request, so I can give you your final assignment.

I'll give a presentation, with Hilly assignments, at the BARC meeting on Friday, October 8th.

If you have any questions about the registration process, please don't hesitate to contact me at [k9tem@arrl.net](mailto:k9tem@arrl.net), and I'll help you through.

Thanks, and 73!

Tom  
K9TEM

## **AUGUST VOLUNTEER MONITOR PROGRAM REPORT**

The Volunteer Monitor Program, a joint venture between ARRL and the FCC, is in place to “enhance compliance” in the Amateur Radio Service.

Highlights of the August report include licensees in several states were sent Advisory Notices when they were found to be operating on frequencies set aside for Haiti earthquake response. Also, several stations were sent Advisory Notices for failing to ID on 75 meter phone. There were a few other notices concerning bad operating practices. On the bright side, there was a “Good Operator” commendation sent to an operator in California for “Exemplary Amateur Procedure” during a California Rescue Communications Net.

The complete article can be found at

<http://www.arrl.org/news/august-2021-volunteer-monitor-program-report>

## **ARRL MEMBERS CAN BENEFIT FROM LEARNING NETWORK**

Another benefit of membership in the ARRL is access to the ARRL Learning Network (<http://www.arrl.org/arrl-learning-network>). Here, ARRL members can register for live webinars, or view recordings of previously recorded sessions. Some of the featured videos available are “Learning with High Altitude Balloons”; “Antenna Zoning Part Six, The Hearing”; and “Introduction to Remote HF Operation”. The next Live event is “Working the Pileup”.

## **UPCOMING INDIANAPOLIS AREA TESTING SESSIONS (check with sponsor before planning to attend)**

Greenfield IN 46140-1100  
Sponsor: Hancock ARC  
Date: Sep 18 2021  
Time: 9:00 AM (Walk-ins allowed)  
Contact: David Keiser  
(317) 440-8486  
Email: [kc9urp@hrtc.net](mailto:kc9urp@hrtc.net)  
VEC: ARRL/VEC  
Location: Park Chapel Christian Church  
1176 E McKenzie Rd  
SE Corner Door 10  
Greenfield IN 46140

Anderson IN 46016-2238  
Sponsor: Anderson Repeater Club  
Date: Sep 21 2021  
Time: 7:00 PM (Walk-ins allowed)  
Contact: Stephen M. Riley  
(765) 425-4627  
Email: [wa9cwe@arrl.net](mailto:wa9cwe@arrl.net)  
VEC: ARRL/VEC

Location: Madison County EOC  
200 Delaware St  
Anderson IN 46016-2238

Bloomington IN 47401-5337  
Sponsor: Bloomington ARC Inc  
Date: Oct 02 2021  
Time: 11:30 AM (No Walk-ins / Register or Call ahead)  
Contact: William F. Wootton  
(812) 876-8689  
Email: wfwootton@gmail.com  
VEC: ARRL/VEC  
Location: First United Church 08-01 session full pre-register  
2420 E 3rd St  
Register at 11:30am  
Testing at 12 NOON  
Bloomington IN 47401-5337

West Lafayette IN 47907-2076  
Sponsor: W9YB Purdue University ARC  
Date: Oct 02 2021  
Time: 9:00 AM (No Walk-ins / Register or Call ahead)  
Contact: Nicholas T. Hyer  
(765) 490-1785  
Email: nicholashyer@gmail.com  
VEC: LAUREL VEC  
Location: Jerry S. Rawls Hall  
100 S Grant St  
Room 2079 2nd Floor  
West Lafayette IN 47907-2076

Indianapolis IN 46254  
Sponsor: Indianapolis Radio Club  
Date: Oct 09 2021  
Time: 12:00 PM (No Walk-ins / Register or Call ahead)  
Contact: Kenneth J. Bandy

(317) 446-3312  
Email: treasurer@indyradioclub.org  
VEC: ARRL/VEC  
Location: Salvation Army EDS Training Facility  
4020 Georgetown Rd  
Indianapolis IN 46254

Noblesville IN 46060-1624  
Sponsor: Central Indiana ARA  
Date: Oct 16 2021  
Time: 10:30 AM (No Walk-ins / Register or Call ahead)  
Contact: Joe March  
(317) 224-9433  
Email: jmarch54@att.net  
VEC: ARRL/VEC  
Location: Hamilton Cty Emer Operations Ctr  
18100 Cumberland Rd  
Sheriff's Campus Training Room  
CALL AHEAD  
Noblesville IN 46060-1624

Anderson IN 46016-2238  
Sponsor: Anderson Repeater Club  
Date: Oct 19 2021  
Time: 7:00 PM (Walk-ins allowed)  
Contact: Stephen M. Riley  
(765) 425-4627  
Email: wa9cwe@arrl.net  
VEC: ARRL/VEC  
Location: Madison County EOC  
200 Delaware St  
Anderson IN 46016-2238

Columbus IN 47201-7477  
Sponsor: SCICSG  
Date: Oct 19 2021

Time: 6:00 PM (Walk-ins allowed)  
Contact: Michael D. Tanksley  
Email: kd9eau@gmail.com  
VEC: LAUREL VEC  
Location: Columbus Twp. Fire & Rescue  
935 Repp Dr  
Columbus IN 47201-7477

## **FEEL FREE TO SHARE OUR NEWSLETTER**

If you belong to any other radio groups, please feel free to share our newsletter with them. They can also sign up to be on our mailing list by filling out the form available at [http://mail.indyradioclub.org/mailman/listinfo/ircnews\\_indyradioclub.org](http://mail.indyradioclub.org/mailman/listinfo/ircnews_indyradioclub.org).

## **SEND ME YOUR HAM RADIO NEWS**

If anyone has any items for the newsletter, please send them to Ken Bandy at [kj9b@arrl.net](mailto:kj9b@arrl.net)

## **Signals from the Past:**

### **From the September, 1961 *Amachewer*:**

If you are having a hard time getting your ten thumbs into those hard to reach places inside the chassis of your rig, hold on to your hats, as things are going to get smaller.

As an example, RCA has developed a transistor which is only a few thousandths of an inch thick. The active material used in its manufacture is cadmium sulfide which is deposited in thin layers between successive layers of metal on a glass plate. These layers, when heated in successive steps in a vacuum, turn to vapor that is collected by condensation on the glass plate.

By using masks the patterns can be formed to provide the electrical contacts needed to operate the transistor. This same process also can be used to produce various patterns of connections among many transistors to complete a desired circuit at the same time that the transistors themselves are being made.



## Upcoming Area Radio Events:

- Hoosier Hills Ham Club Hamfest: October 2 at the Lawrence Co. 4H Fairgrounds. Go to [http://www.w9qyq.org/pdf/2021\\_Hamfest\\_Flyer.pdf](http://www.w9qyq.org/pdf/2021_Hamfest_Flyer.pdf) for more information.
- Shelbyville Tailgate Hamfest: October 16 at the Shelby Co. Fairgrounds. Go to <http://www.arrl.org/hamfests/shelbyville-2021-tailgate> for more info.
- Hamtober Fest: October 23 at the Lynnvile Community Center. Go to <http://www.w9og.net/hamtoberfest-hamfest-2021> for more info.
- Fort Wayne Hamfest/2021 ARRL Central Division Convention: November 13 & 14 at the Allen County War Memorial Coliseum. Go to <http://acarts.com/hfmain.htm> for more info.

## 2021 Officers:

- President: David Spoelstra, N9KT – [president@indyradioclub.org](mailto:president@indyradioclub.org)
- Vice Pres.: Dave Miller, K9RTT - [vp@indyradioclub.org](mailto:vp@indyradioclub.org)
- Secretary: Ken Bandy, KJ9B - [secretary@indyradioclub.org](mailto:secretary@indyradioclub.org)
- Treasurer: Ken Bandy, KJ9B - [treasurer@indyradioclub.org](mailto:treasurer@indyradioclub.org)
- Chief Operator: OPEN
- Dir. at large: Jim Rinehart, K9RU – [board@indyradioclub.org](mailto:board@indyradioclub.org)
- Dir. at large: Jay Kraus, W9TC - [board@indyradioclub.org](mailto:board@indyradioclub.org)
- Dir. at large: Jeff Hammer, N9NIC - [board@indyradioclub.org](mailto:board@indyradioclub.org)
- Dir. at large: George Taylor, KC9IKD - [board@indyradioclub.org](mailto:board@indyradioclub.org)
- Dir. at large: Kyle Bandy, KC9GLR - [board@indyradioclub.org](mailto:board@indyradioclub.org)
- W9JP Trustee: Jay Kraus, W9TC - [w9jp.trustee@indyradioclub.org](mailto:w9jp.trustee@indyradioclub.org)